Brain Drain from India

618. SHRI IQBAL SINGH: Will the PRIME MINISTER be pleased to state:

(a) what are the details of brain drain from India to foreign countries in various fields during the period 1990—93;

(b) the details of our young scientists and engineers who had gone abroad for higher studies have not returned after completing their studies during this period;

(c) whether Government have conducted any survey with respect to brain drain during this period;

(d) if so, the details thereof, institution-wise and State-wise;

(e) whether Government have studied the phenomenon and would evolve effective strategies to convince and motivate our scientists and engineers to come back after completing their studies abroad; and

(f) if so, what effective measures are being taken by Government to prevent brain drain from India to abroad?

THE MINISTER OF STATE IN PRIME MINISTER'S OFFICE AND MINISTER OF STATE IN THE DEPARTMENTS OF ATOMIC ENERGY, SPACE WITH ADDITIONAL CHARGE OF THE MINISTER OF STATE IN THE MINISTRY OF SCIENCE AND TECHNOLOGY (SHRI BHUVNESH CHATURVEDI): (a) and (b) Some Indian scientists and technologists do migrate to foreign countries, but it has not been possible to maintain a record.

(c) and (d) No survey has been done to asses brain drain during 1990—93.

(e) and (f) Several steps have been taken from time to time by the Government to prevent brain drain and also to attract scientists and technologists settled abroad to return to India. Some of these are:

- Increase in the outlay for Science and Technology sector in successive Five Year Plans.
- Creation of new scientific Departments /Organisations.
- Setting up of more centres of excellence /advanced studies in Universities and academic institutions.
- Creation of core groups of professionals with necessary modern facilities required for pursuing research in new and frontier areas of science.
- S&T based training for entrepreneurial development.
- Delegation of enhanced administrative and financial powers to S&T institutions to improve working conditions of scientists.
- Manpower development training / retraining programmes through associateships / fellowships / courses.
- Provision for temporary placement of Scientists and Techno-crats under the scheme of Scientists Pool.
- Creation of supernumerary Posts.
- Invitation to distinguished men and women of Indian origin settled abroad for short term technical assignments to assist in frontier and emerging areas of S&T.

Concealment of Technical Report on Latur Quake

619. SHRI KRISHNA KUMAR BIRLA: Will the PRIME MINISTER be pleased to state:

(a) whether it is a fact that the Department of Science and Technology has kept the technical report on the Latur quake a secret instead of making it public for the benifit of scientific community;

(b) if so, the reasons therefor;

(c) whether it is also a fact that several other Ministries have also been held responsible as per report of the Department; and

(d) if so, the details thereof?

THE MINISTER OF STATE IN PRIME MINISTER'S OFFICE AND MINISTER OF STATE IN THE DEPARTMENTS OF ATOMIC ENERGY, SPACE WITH ADDITIONAL CHARGE OF THE MINISTER OF STATE IN THE MINISTRY OF SCIENCE AND TECHNOLOGY (SHRI BHUVNESH CHATURVEDI): (a) No Sir. Copies of the

B.K. Rao Committee Report have been made available to various Ministries, agencies and other institutions concerned with implementation.

(b) to (d) Do not arise, Sir.

Tremors in Khandwa

620. SHRI GHUFRAN AZAM: Will the PRIME MINISTER be pleased to state:

(a) whether Government's attention has been drawn to the newsitem captioned "Major quake in Khandwa predicted", which appeared in the Statesman dated the 20th December 1993;

(b) whether a series of tremors have rocked Khandwa in Madhya Pradesh during the last six months; and

(c) if so, what are the precautionary steps proposed to be taken by Government in this regard?

THE MINISTER OF STATE IN PRIME MINISTER'S OFFICE AND MINISTER OF STATE IN THE DEPARTMENTS OF ATOMIC ENERGY, SPACE WITH ADDITIONAL CHARGE OF THE MINISTRY OF STATE IN THE MINISTRY OF SCIENCE AND TECHNOLOGY (SHRI BHUVNESH CHATURVEDI) (a) Yes, Sir.

(b) A series of tremors occured around Takli and Sarola village (in East Nimar district, MP) about 15 kms south of Khandwa from the end of November 1993. India Meteorological Department surveyed the area by installing temporary high gain field observatory in December, 1993. The observatory recorded a number of tremors of low magnitude. These tremors were of swarm type. Such swarm activity was also noticed in neighbouring districts.

(c) The survey results have been communicated to the M.P. government. Further, the state government has been advised to take appropriate steps to ensure that dwellings and other structures are properly engineered in the area.

Setting up of Seismic Laboratory in M.P.

621. SHRI GHUFRAN AZAM: Will the PRIME MINISTER be pleased to state:

(a) whether it is a fact that Madhya Pradesh Government has urged the Union Government to set up a seismic laboratory in the State to prevent another earthquake tragedy;

(b) whether it is also a fact that several districts of Madhya Pradesh have been constantly receiving tremors in the recent past:

(c) if so, the details thereof; and

(d) what is the reaction of Union Government on the proposal of setting up of seismic laboratory in the State?

THE MINISTER OF STATE IN PRIME MINISTER'S OFFICE AND MINISTER OF STATE IN THE DEPARTMENTS OF ATOMIC ENERGY, SPACE WITH ADDITIONAL CHARGE OF THE MINISTER OF STATE IN THE MINISTRY OF SCIENCE AND TECHNOLOGY (SHRI BHUVNESH CHATURVEDI): (a) Yes, Sir.

(b) Seismic activity occured in short spells in East and West Nimar and Khargone districts.

(c) Tremors of low magnitude occured around Taklikalan village (in East Nimar districts. M.P.) about 15 kms. south of Khandwa in November, 1993. Such swarn activity was also noted in the neighbouring districts around Silawad village of west Nimar district in Jan-Feb. 1992 and around Kusuman village in Khargone district in Sept. 1986 and again in Sept.-Oct. 1988. Swarn type activity generally decays after sometime.

(d) A comprehensive project for intensive seismological monitoring has been formulated for mapping seismically active areas of peninsular India, which will cover Madhya Pradesh also. The India Meteorological Department will be setting up a modern seismological observatory at Bhopal shortly.

अमरीका के ओकलेहामा उपग्रह केन्द्र के साथ करार

622. **श्रीमती सत्या बहिन:** क्या प्रधान मंत्री यह बताने की कृपा करेंगे कि:

(क) क्या यह सच है कि अमरीका के ओकलेहामा उपग्रह केन्द्र ने भारतीय दूर संचार उपग्रह से प्राप्त जानकारी को हासिल करने के लिए भारत के साथ करार करने की पेशकश की है; और

(ख) यदि हां, तो इसका ब्यौरा क्या है और इस प्रस्ताव पर सरकार ने क्या निर्णय लिया है?